

# Venu SATULURI

10+ years of applying ML to real-world problems with a focus on accuracy, scalability, and simplicity.

## PERSONAL DATA

---

EMAIL: [venu.satuluri@gmail.com](mailto:venu.satuluri@gmail.com)  
GOOGLE SCHOLAR: [Link to Scholar profile](#)  
LINKEDIN: <https://www.linkedin.com/in/venusatuluri>  
WEBSITE: <https://venusatuluri.github.io>  
GITHUB: <https://github.com/venusatuluri>

## WORK EXPERIENCE

---

NOV 2022	Principal Machine Learning Engineer at TWITTER
MAY 2012	Personalization and Recommendations
During my decade at Twitter, I played a key role in several ground-breaking products and improvements in the space of recommendations and machine learning. During 2013-'16, I co-founded and was lead engineer for <b>MagicRecs</b> , a key growth driver for Twitter. In '17, I created <b>SimClusters</b> , which enabled a quantum leap in Twitter's ability to model user interests and spin up new recommendations products effortlessly. I was group tech lead for <b>Interests</b> , the top company initiative during 2020-'21. I joined as a MLE II in 2012 and held the role of a Principal ML Engineer at the time I left.	
MARCH 2012	Ph.D. Candidate
AUG 2006	Data Mining Research Lab, The Ohio State University
Did research in graph clustering (a.k.a. community discovery from networks) and similarity search algorithms. My research was published in the top venues of the field such as KDD, SIGMOD, and VLDB.	
JUN 2006	Software Engineer
JUL 2005	D. E. Shaw India Software

## SELECTED CODE

---

**SBF** Sparse Binary Factorization, community discovery from billion-node graphs, used in SimClusters.  
**Analyses** A repo with notebooks doing various ML analyses e.g. comparing different Transformer implementations.

## SELECTED RESEARCH PUBLICATIONS

---

KDD 2020	Simclusters: Community-based representations for heterogeneous recommendations at Twitter Venu Satuluri, Yao Wu, Xun Zheng et. al.
PVLDB 2014	Real-time Twitter recommendation: online motif detection in large dynamic graphs Pankaj Gupta, Venu Satuluri, Ajeet Grewal et. al
PVLDB 2012	Bayesian locality sensitive hashing for fast similarity search Venu Satuluri and Srinivasan Parthasarathy
SIGMOD 2011	Local graph sparsification for scalable clustering Venu Satuluri, Srinivasan Parthasarathy, and Yiye Ruan
KDD 2009	Scalable graph clustering using stochastic flows: applications to community discovery Venu Satuluri and Srinivasan Parthasarathy

## EDUCATION

---

MAY 2012	Ph.D. in COMPUTER SCIENCE, <b>The Ohio State University</b> Thesis: "Scalable Clustering for Modern Networks"
MAY 2005	B.Tech. in COMPUTER SCIENCE <b>National Institute of Technology Karnataka, India</b>

## AWARDS

---

2013	ACM SIGKDD Dissertation Awards, <i>Honorable Mention</i>
2011	Outstanding Graduate Research Award Dept. of Computer Science and Engineering, The Ohio State University